

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of)
GUERIN-MARCHAND et al) Group Art Unit: Unassigned
Application No.: TBA (Div of 08/098,327)) Examiner: Unassigned
Filed: Even date herewith)
For: PEPTIDE SEQUENCES SPECIFIC)
FOR THE HEPATIC STAGES OF *P.*)
FALCIPARUM BEARING)
EPITOPES CAPABLE OF)
STIMULATING THE T)
LYMPHOCYTES)

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents
Washington, D.C. 20231

Sir:

Prior to examination of the referenced application, please amend the above-cited application as follows.

IN THE CLAIMS:

Kindly delete claims 1-26. Please add the following new claims:

27. A DNA sequence encoding a polypeptide comprising at least one liver stage-specific T cell epitope of *P. falciparum* Liver Stage Antigen (LSA).

28. A DNA according to claim 27, wherein said polypeptide has an amino acid sequence selected from the group consisting of the amino acid sequence of Figure 9 and the amino acid sequence of Figure 10.

29. A DNA encoding a polypeptide consisting of amino acid sequence SEQ ID NO: 19, 20, 21, 22 or 23 or an epitope effective portion thereof.

30. A DNA according to claim 29, wherein said polypeptide is preceded by one or more of the amino acid sequences of SEQ ID NOs 2-18, wherein X_1 is Ser or Arg; X_2 is Glu or Asp; X_3 is Arg or Leu; and X_4 is Glu or Gly.

31. A DNA according to claim 27, wherein said polypeptide has an amino acid sequence consisting of the amino acid sequence of Figure 7.

32. A DNA encoding polypeptide comprising at least one epitope of *P. falciparum* Liver Stage Antigen (LSA), wherein said polypeptide has an amino acid sequence consisting of the first 153 amino acids of the amino acid sequence of SEQ ID NO: 37, or an epitope effective portion thereof.

33. A DNA according to claim 32, wherein said polypeptide is preceded by one or more of the amino acid sequences of SEQ ID NOs 2-18, wherein wherein X_1 is Ser or Arg; X_2 is Glu or Asp; X_3 is Arg or Leu; and X_4 is Glu or Gly.

34. A DNA according to claim 32, wherein said polypeptide is followed by one or more of the amino acid sequences of SEQ ID NOs 2-18, wherein wherein X₁ is Ser or Arg; X₂ is Glu or Asp; X₃ is Arg or Leu; and X₄ is Glu or Gly.

35. A DNA according to claim 27, further comprising DNA encoding at least one B epitope from a liver-stage specific protein produced by *P. falciparum*.

36. A DNA encoding a polypeptide consisting of the last 279 amino acids of the amino acid sequence of SEQ ID NO, 45 or an epitope effective portion thereof.

37. A DNA polypeptide according to any one of claims 29, 32 or 44, wherein said polypeptide is linked to one or several amino acids of one or more peptides other than a *P. falciparum* Liver Stage Antigen.

REMARKS

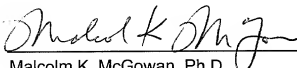
Entry of the foregoing, and early and favorable consideration of the subject application on the merits is respectfully requested.

By the present Amendment, claims 1-26 have been deleted without prejudice or disclaimer. New claims 27-37, directed to DNA encoding the polypeptides of the present invention, have been added. These claims derive support from throughout the specification and claims as originally filed. No new matter has been added.

In the event that there are any questions concerning this Amendment, or the application in general, the Examiner is respectfully urged to telephone the undersigned so that prosecution of the application may be expedited.

Respectfully submitted,

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